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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,079	03/30/2001	Errol C. Heiman	STL9524	6981

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EXAMINER
LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
2161	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/823,079	HEIMAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Etienne P LeRoux	2161	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-21, 23-31 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-21, 23-31 and 33-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

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*Claim Status:*

Claims 18-21, 23-31 and 33-36 are pending; claims 1-17, 22, 32 and 37 have been canceled. Claims 18-21, 23-31 and 33-36 are rejected as detailed below.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-20, 24-30 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,712,553 (Hallberg) in view of US Pat No 5,970,074 issued to Ehiro (hereafter Ehiro) and further in view of US Pat No 5,343,083 (Fuse), hereafter Fuse.

Claims 18 and 28:

Hallberg discloses:

a multi-voltage power source having a first voltage output, which is capable of supplying a plurality of selectable voltage level for a constant power supply voltage at a nominal power supply voltage of an electronic device [second voltage and third voltage supplied from subgroups of the first group that includes at least one battery, col 11, lines 1-15]

Hallberg discloses the elements of the claimed invention as noted above but does not disclose circuitry configured to introduce controllable disturbances into the constant power supply voltage. Ehiro discloses circuitry configured to introduce controllable disturbances into the

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constant power supply voltage [Figs 1, 4 and 5, col 7, lines 10-50]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hallberg to include circuitry configured to introduce controllable disturbances into the constant power supply voltage as taught by Ehiro for the purpose of measuring the threshold characteristic of a semiconductor integrated circuit [col 2, lines 15-20].

The combination of Hallberg and Ehiro discloses the elements of the claimed invention]as noted above and furthermore discloses an additional power source having a second voltage output, which is capable of supplying an additional voltage level that is different from the plurality of selectable voltage levels [Hallberg, first voltage, greater differentials between the voltage levels and at least three voltages are possible, col 11, lines 1-15]

Claims 19 and 29:

The combination of Hallberg, Ehiro and Fuse discloses the elements of the claimed invention as noted above and further Ehiro discloses wherein the disturbance is a rising pulse having a maximum voltage which is controllable [Fig 4, col 7, lines 10-20, alternatively, Test Step in Fig 5 can be interpreted as comprising a negative step pulse and a positive step pulse]

Claims 20 and 30:

The combination of Hallberg, Ehiro and Fuse discloses the elements of the claimed invention as noted above and further Ehiro discloses wherein the disturbance is a low-going pulse having a minimum voltage being less than the nominal power supply voltage [Fig 5]

Claims 24 and 34:

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The combination of Hallberg, Ehiro and Fuse discloses the elements of the claimed invention as noted above and further Ehiro discloses a manually operated user interface used to control the disturbances [col 6, lines 35-45]

Claims 25 and 36:

The combination of Hallberg, Ehiro and Fuse discloses the elements of the claimed invention as noted above and further Ehiro discloses wherein the disturbance is a plurality of pulses and a frequency and a number of pulses in the plurality of pulses are controllable [, col 6, lines 35-45, Fig 5]

Claim 26 and 35:

The combination of Hallberg, Ehiro and Fuse discloses the elements of the claimed invention as noted above and further Ehiro discloses wherein the disturbance is at least one pulse having a duration and a magnitude which are controllable [Fig 5]

Claim 27:

The combination of Hallberg, Ehiro and Fuse discloses the elements of the claimed invention as noted above and further Ehiro discloses wherein the disturbance comprises a voltage sequence applied during powering up of the electronic device [Fig 5]

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 21 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hallberg, Ehiro and Fuse and further in view of US Pat No 5,386,183 (Cronvich), hereafter Cronvich.

Claim 21 and 31:

The combination of Hallberg, Ehiro and Fuse discloses the elements of claims 18/28 as noted above but does not disclose wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC. Cronvich discloses wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC [Fig 3 and col 12, lines 23-26]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify then above combination of references to include wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC as taught by Cronvich for the purpose of providing a power source suitable for many microcomputer and logic circuits [col 12, lines 23-26].

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Claims 23 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hallberg, Ehiro and Fuse and further in view of US Pat No 4,764,652 (Lee et al), hereafter Lee.

Claims 23 and 33:

The combination of Hallberg, Ehiro and Fuse discloses the elements of claims 18 and 22/28 and 32 as noted above but does not disclose wherein the additional voltage is +24VDC. Lee discloses +24VDC [col 1, lines 55-60]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above combination of references to include wherein the additional voltage is +24VDC as taught by Lee for the purpose of including a power supply voltage that is used for telecommunications equipment [col 1, lines 55-60].

***Response to Arguments***

Applicant's arguments filed 2/5/2007 have been considered but are moot based on above new grounds of rejection.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached Monday through Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

2/28/2007

*Etienne P LeRoux*  
*primary examiner*